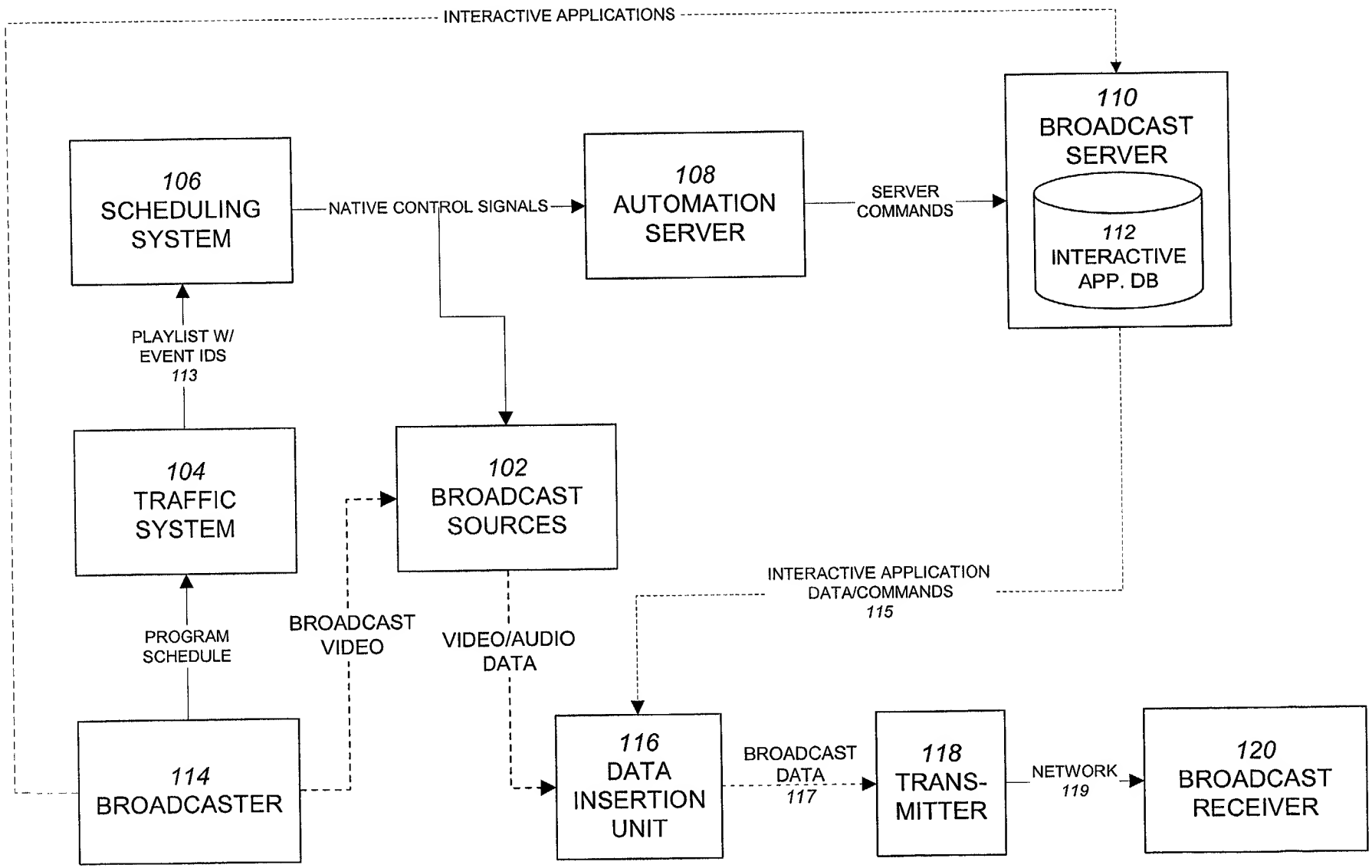

INTERACTIVE APPLICATIONS
106
SCHEDULING SYSTEM
NATIVE CONTROL SIGNALS
108
AUTOMATION SERVER
SERVER COMMANDS
110
BROADCAST SERVER
112
INTERACTIVE APP. DB
PLAYLIST W/ EVENT IDS
113
104
TRAFFIC SYSTEM
102
BROADCAST SOURCES
INTERACTIVE APPLICATION DATA/COMMANDS
115
PROGRAM SCHEDULE
BROADCAST VIDEO
VIDEO/AUDIO DATA
114
BROADCASTER
116
DATA INSERTION UNIT
BROADCAST DATA
117
118
TRANS-MITTER
NETWORK
119
120
BROADCAST RECEIVER

FIG. 1

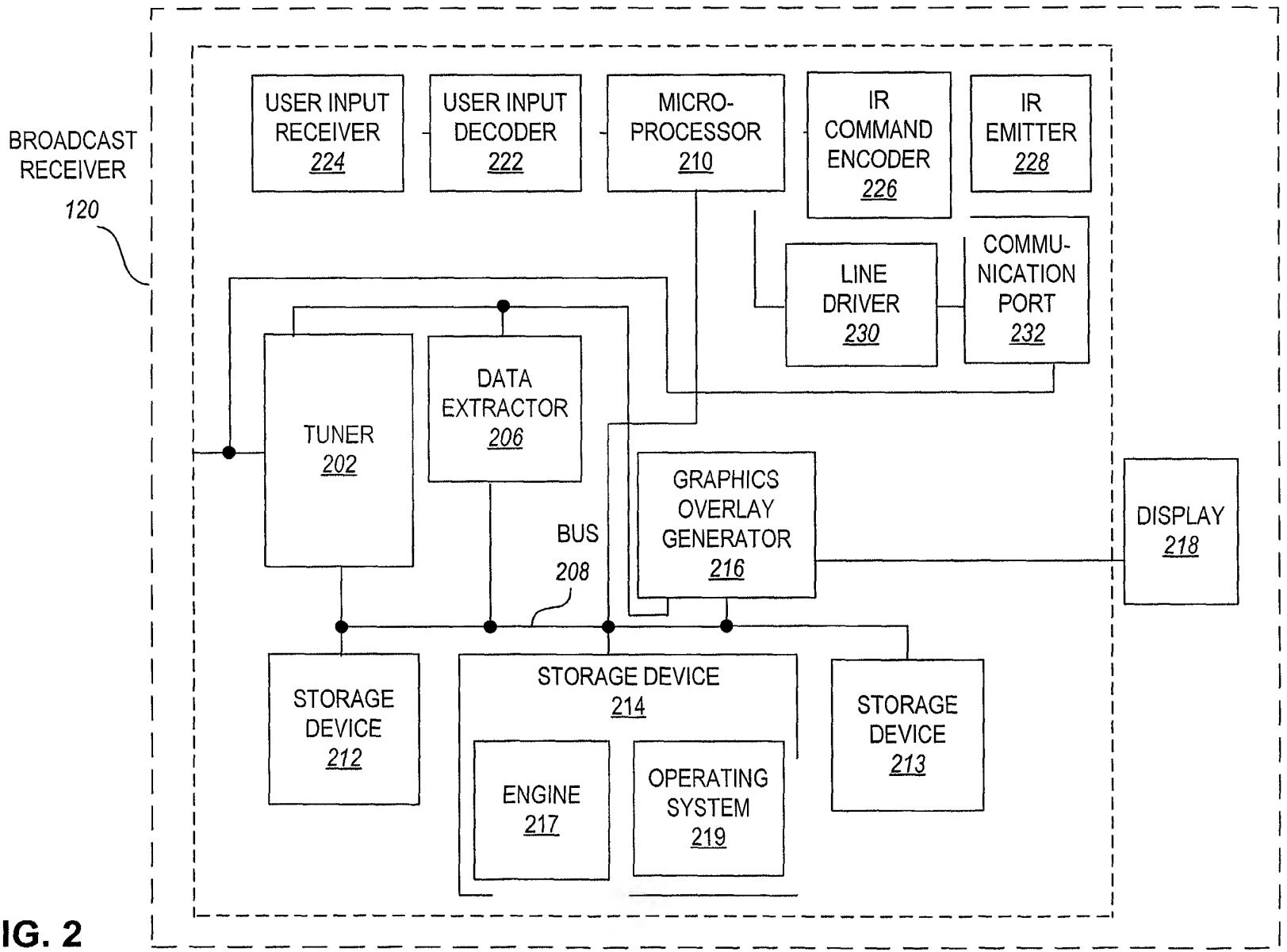
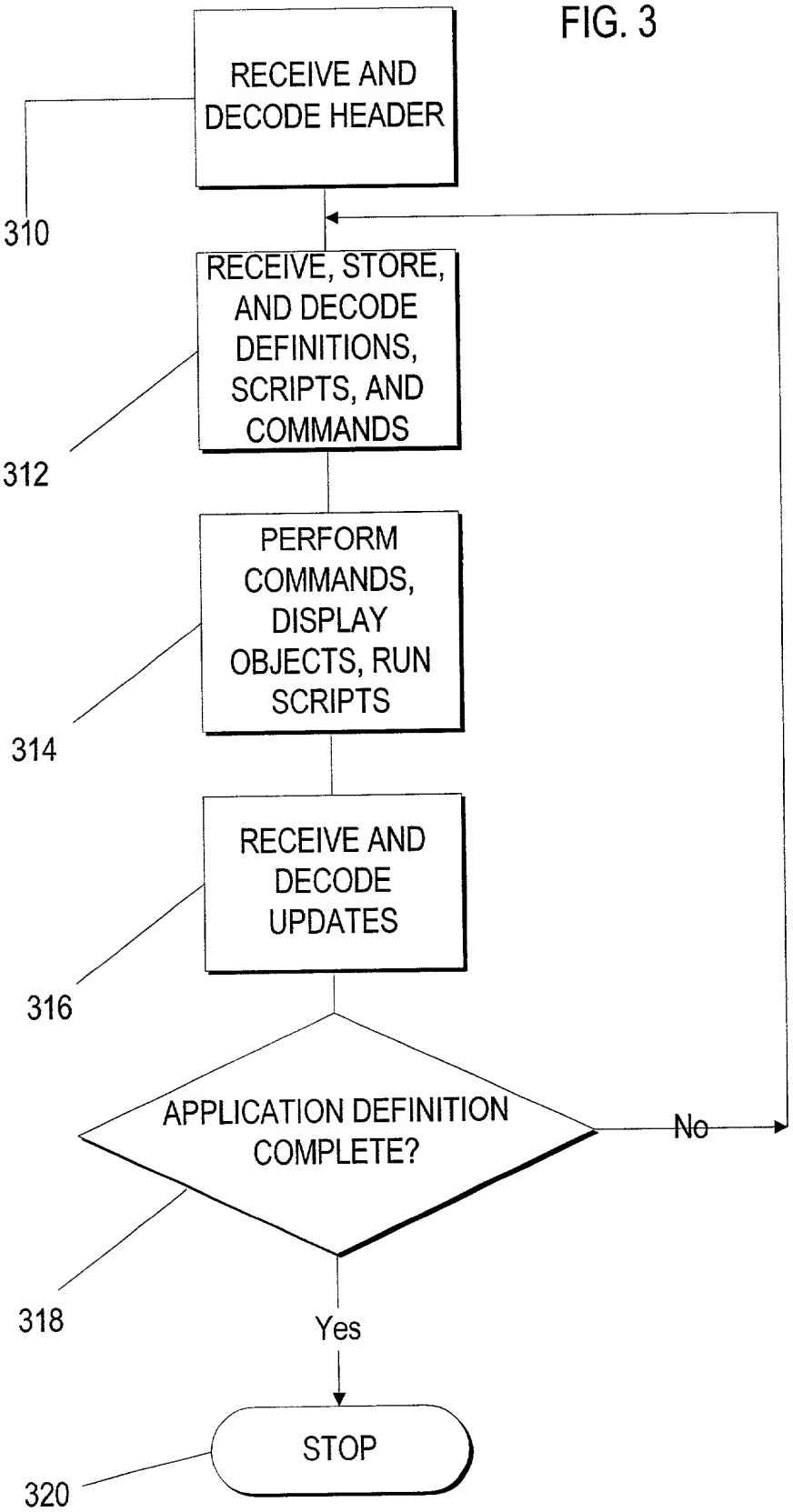

BROADCAST RECEIVER
120
USER INPUT RECEIVER
224
USER INPUT DECODER
222
MICRO-PROCESSOR
210
IR COMMAND ENCODER
226
IR EMITTER
228
LINE DRIVER
230
COMMU-NICATION PORT
232
TUNER
202
DATA EXTRACTOR
206
GRAPHICS OVERLAY GENERATOR
216
DISPLAY
218
BUS
208
STORAGE DEVICE
212
STORAGE DEVICE
214
ENGINE
217
OPERATING SYSTEM
219
STORAGE DEVICE
213

FIG. 2

FIG. 3


RECEIVE AND DECODE HEADER
310
RECEIVE, STORE, AND DECODE DEFINITIONS, SCRIPTS, AND COMMANDS
312
PERFORM COMMANDS, DISPLAY OBJECTS, RUN SCRIPTS
314
RECEIVE AND DECODE UPDATES
316
APPLICATION DEFINITION COMPLETE?
No
318
Yes
STOP
320

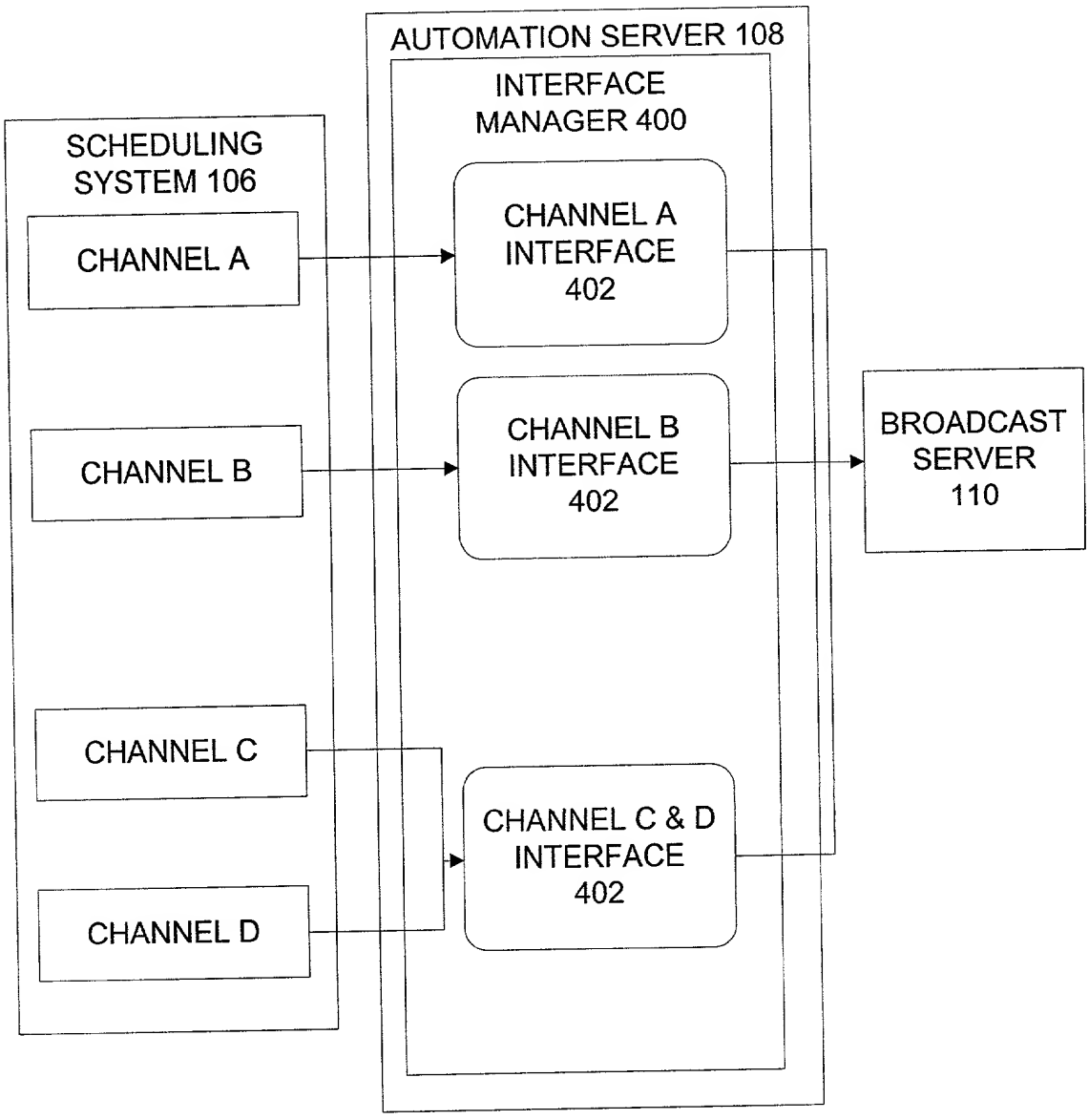

AUTOMATION SERVER 108
INTERFACE MANAGER 400
SCHEDULING SYSTEM 106
CHANNEL A
CHANNEL B
CHANNEL C
CHANNEL D
CHANNEL A INTERFACE 402
CHANNEL B INTERFACE 402
CHANNEL C & D INTERFACE 402
BROADCAST SERVER 110

FIG. 4

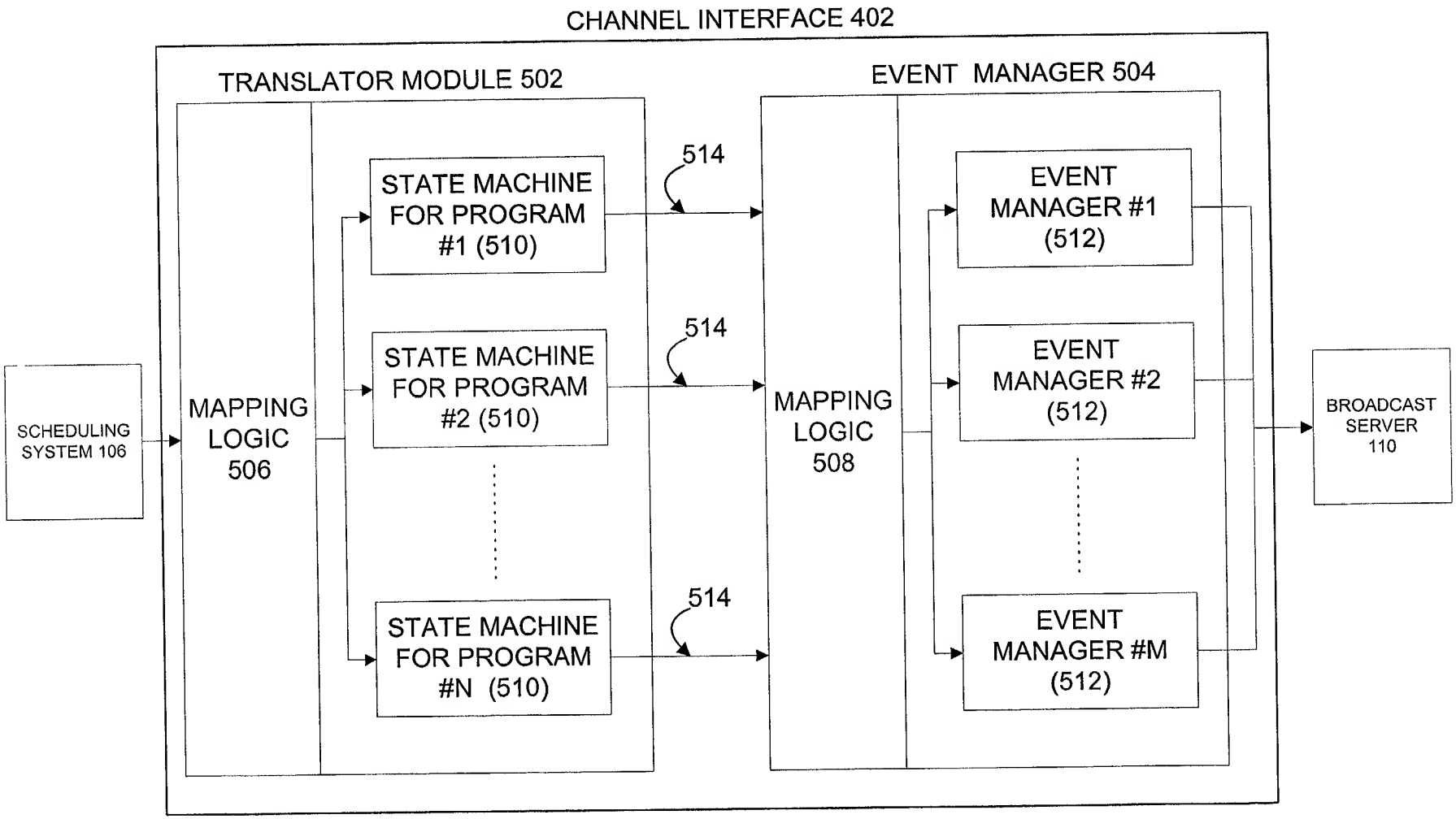

CHANNEL INTERFACE 402
TRANSLATOR MODULE 502
EVENT MANAGER 504
SCHEDULING SYSTEM 106
MAPPING LOGIC 506
STATE MACHINE FOR PROGRAM #1 (510)
STATE MACHINE FOR PROGRAM #2 (510)
STATE MACHINE FOR PROGRAM #N (510)
514
514
514
MAPPING LOGIC 508
EVENT MANAGER #1 (512)
EVENT MANAGER #2 (512)
EVENT MANAGER #M (512)
BROADCAST SERVER 110

FIG. 5

Interface Manager Life Cycle Interaction Diagram

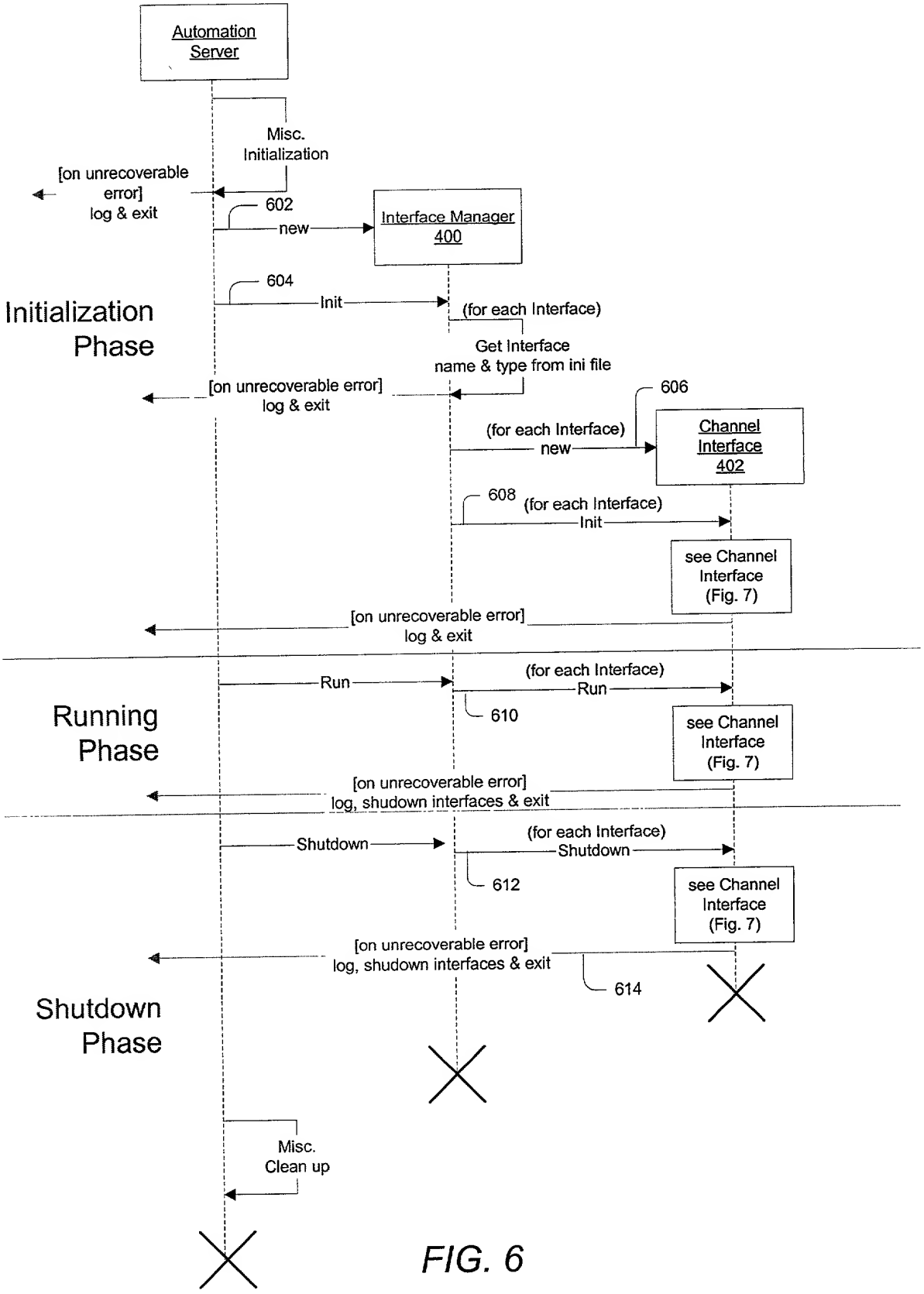


FIG. 6

Interface Life Cycle Interaction Diagram

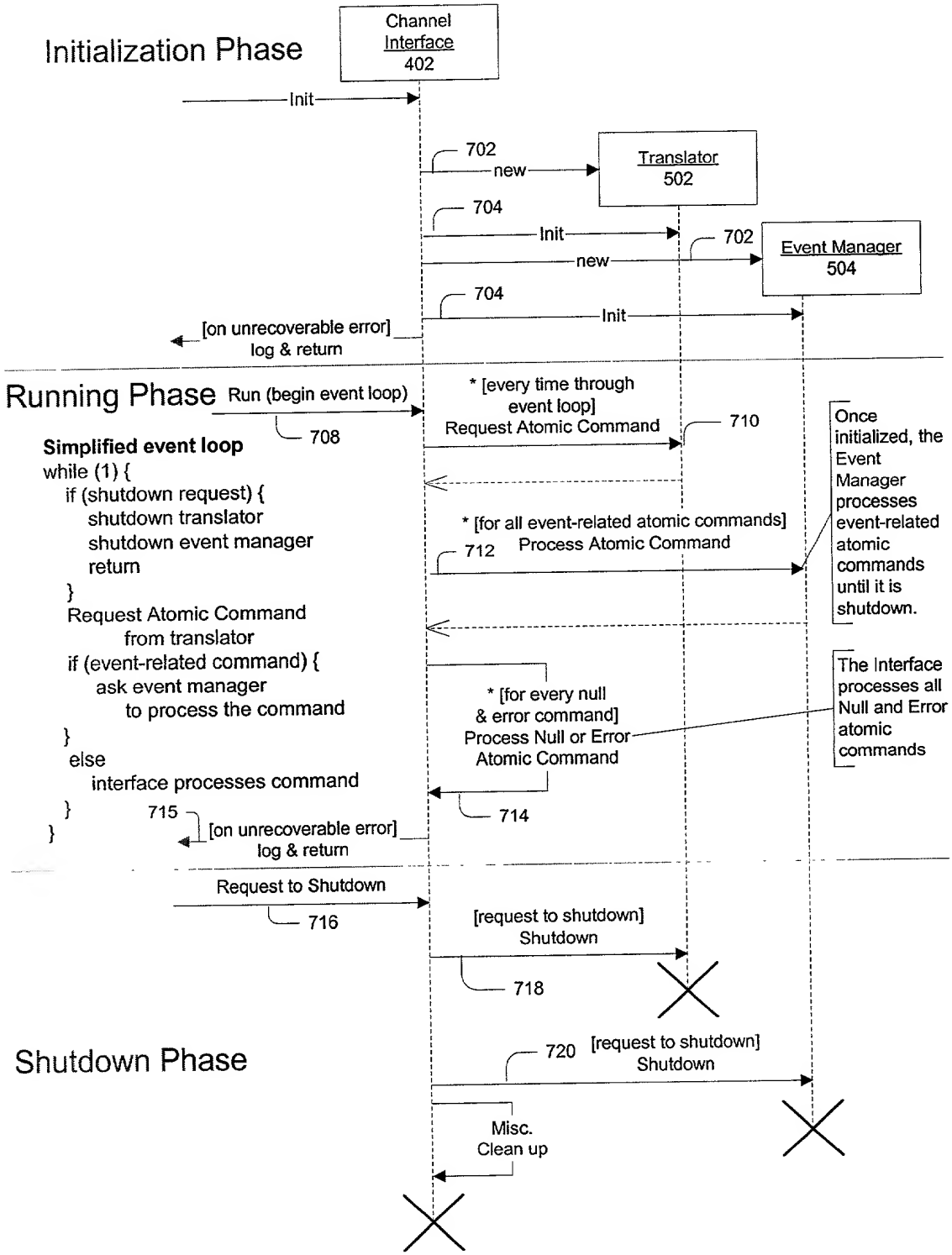
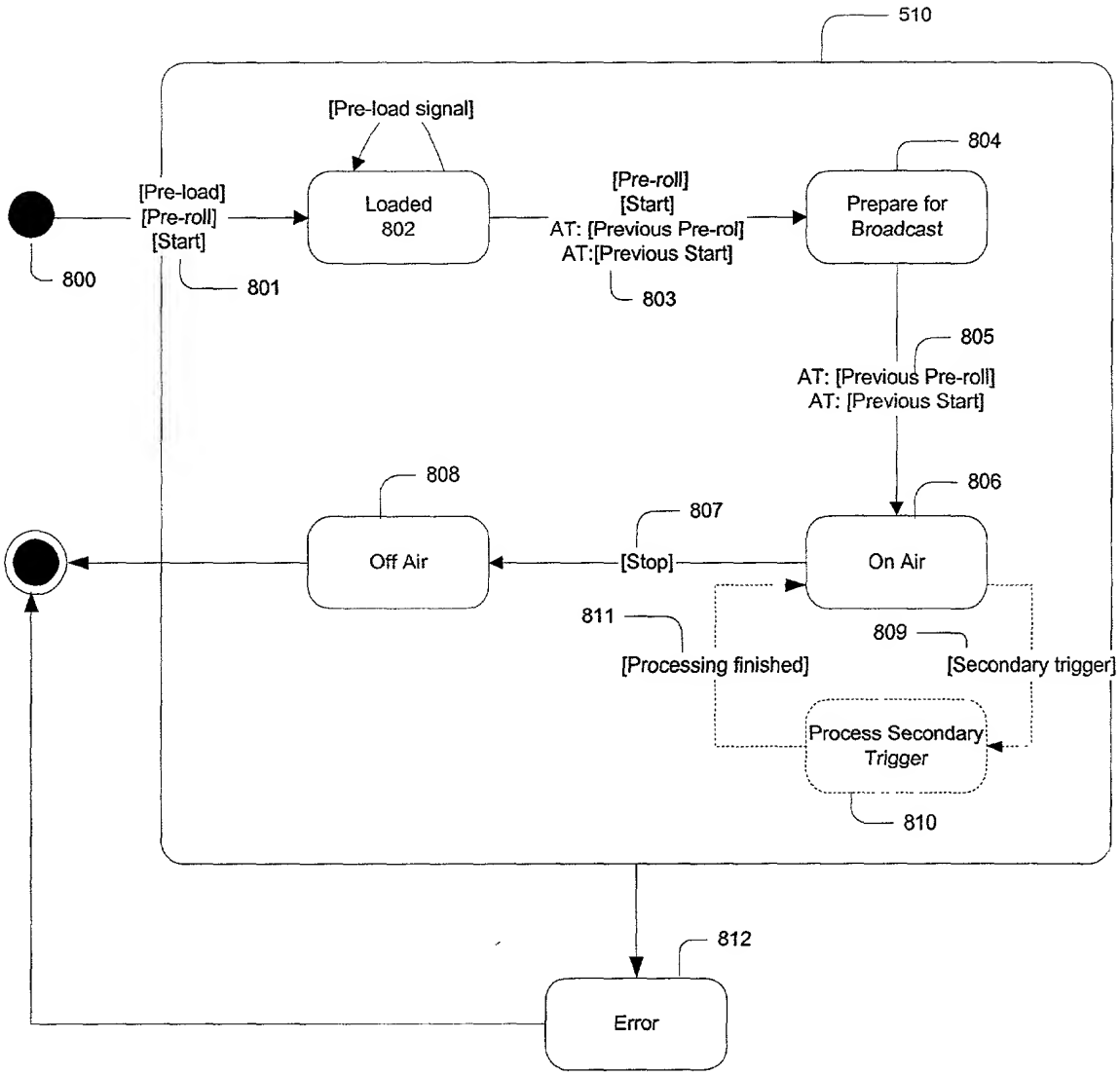


FIG. 7



AT: Automatic Transition on Previous Signal

FIG. 8

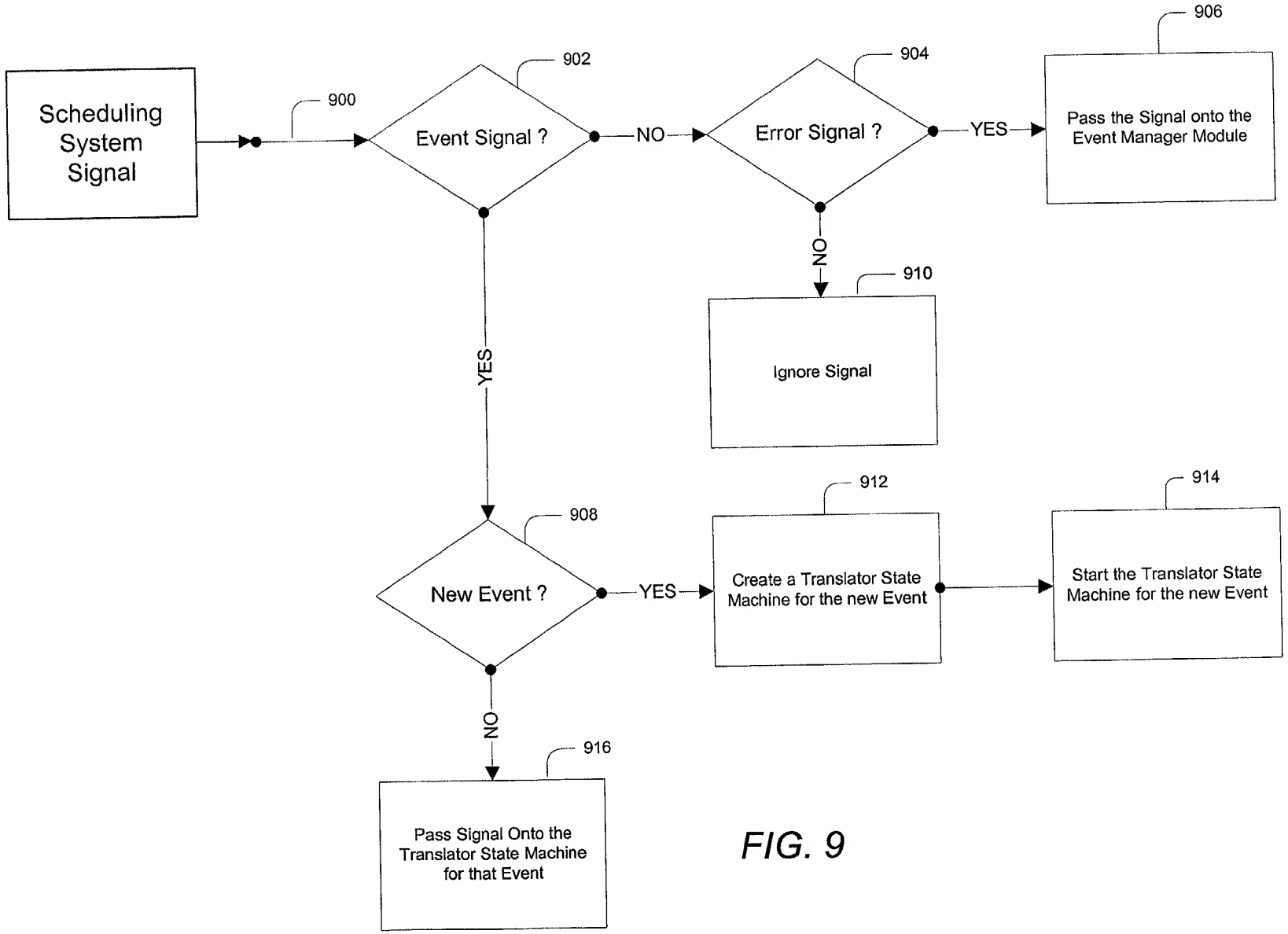

Scheduling System Signal
900
Event Signal ?
902
NO
Error Signal ?
904
YES
Pass the Signal onto the Event Manager Module
906
NO
Ignore Signal
910
YES
New Event ?
908
YES
Create a Translator State Machine for the new Event
912
Start the Translator State Machine for the new Event
914
NO
Pass Signal Onto the Translator State Machine for that Event
916

FIG. 9

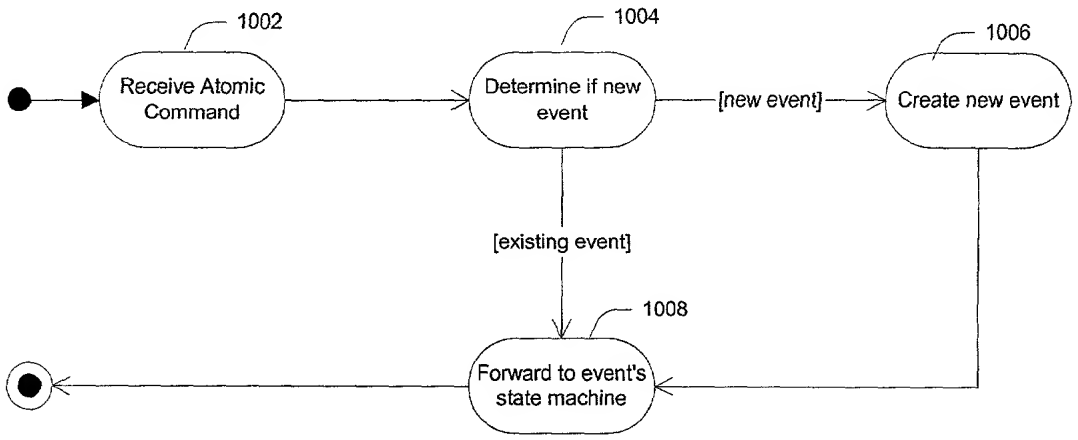
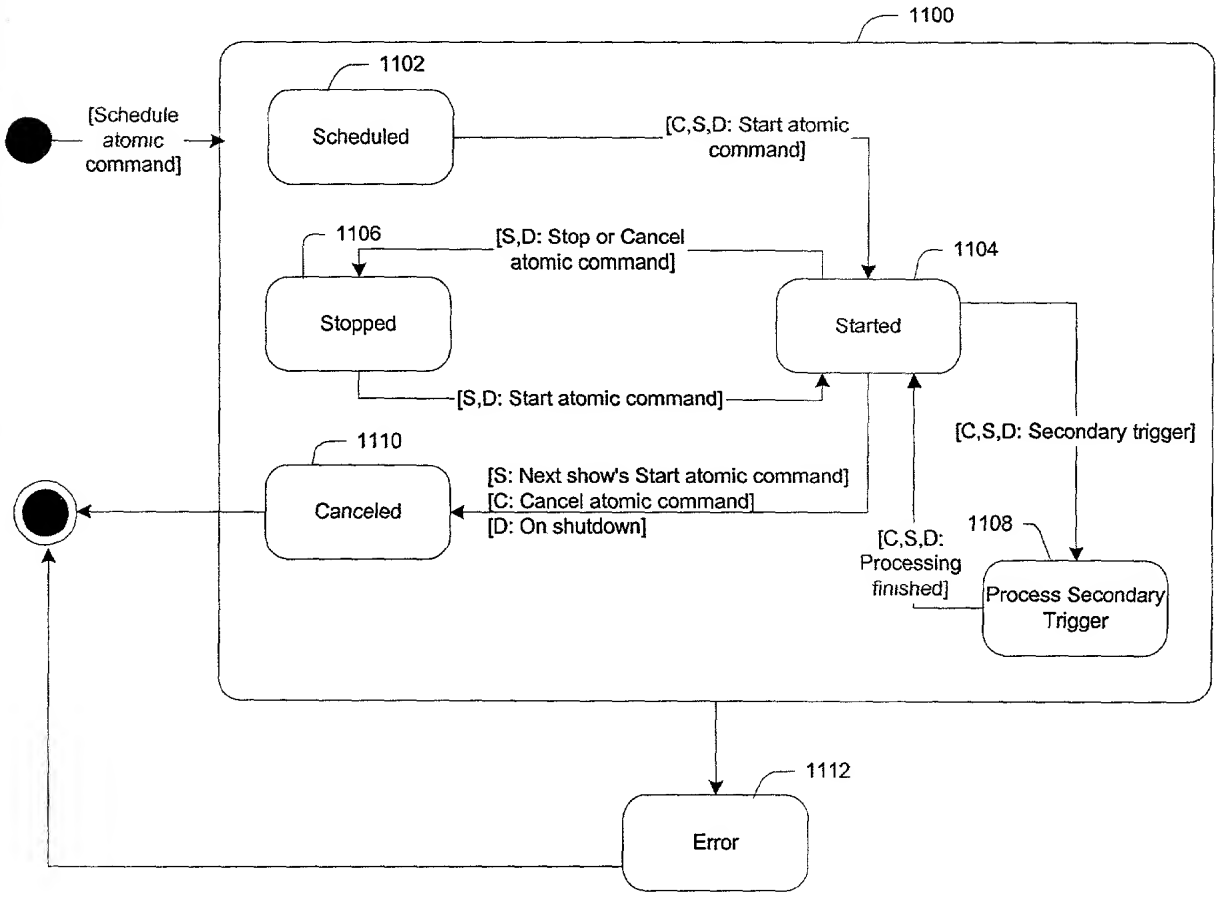


FIG. 10



C: Commercial Event
S: Show Event
D: Default Event

FIG. 11

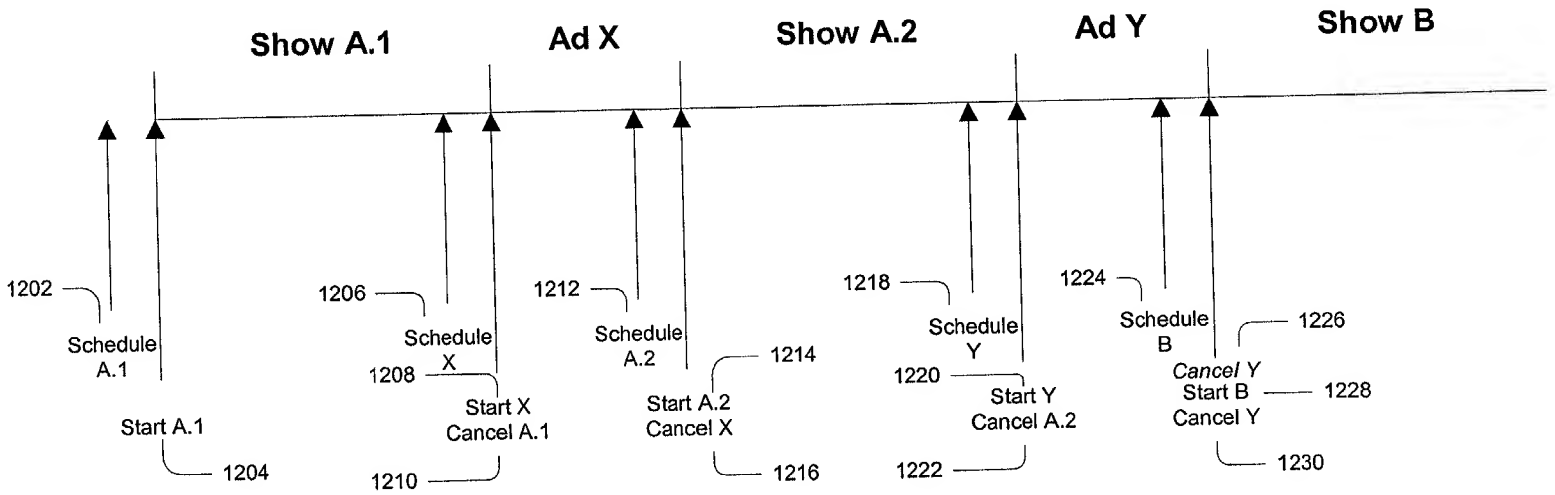

Show A.1
Ad X
Show A.2
Ad Y
Show B
1202
Schedule A.1
Start A.1
1204
1206
Schedule X
1208
Start X
Cancel A.1
1210
1212
Schedule A.2
1214
Start A.2
Cancel X
1216
1218
Schedule Y
1220
Start Y
Cancel A.2
1222
1224
Schedule B
1226
Cancel Y
Start B
Cancel Y
1228
1230

FIG. 12

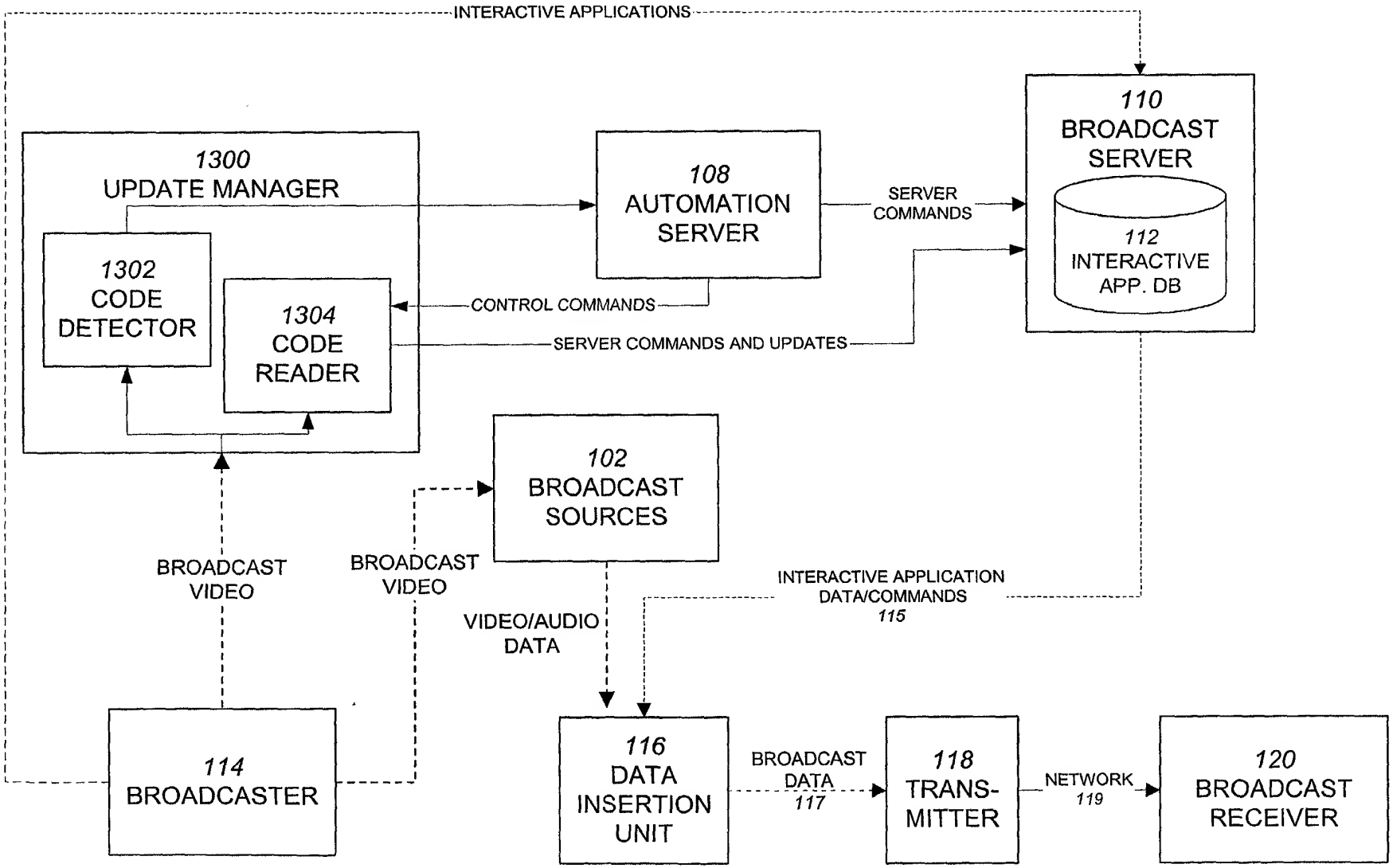

INTERACTIVE APPLICATIONS
110
BROADCAST
SERVER
112
INTERACTIVE
APP. DB
1300
UPDATE MANAGER
1302
CODE
DETECTOR
1304
CODE
READER
108
AUTOMATION
SERVER
SERVER
COMMANDS
CONTROL COMMANDS
SERVER COMMANDS AND UPDATES
102
BROADCAST
SOURCES
BROADCAST
VIDEO
BROADCAST
VIDEO
VIDEO/AUDIO
DATA
INTERACTIVE APPLICATION
DATA/COMMANDS
115
114
BROADCASTER
116
DATA
INSERTION
UNIT
BROADCAST
DATA
117
118
TRANS-
MITTER
NETWORK
119
120
BROADCAST
RECEIVER

FIG. 13